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THE INAUGRAL AFRICAN UNION CONFERENCE ON DIGITAL AGRICULTURE

1-3 December Addis Ababa , African Union Headquarters

"Shaping Agricultural Policy for Africa's Future: Innovation, Climate-Smart Practices, and Digital Transformation for Sustainable Development"

Agriculture is a major driver of the African economy. The role of agriculture has been well defined by the African Development Bank and the World Bank as being of leading importance to the livelihoods of countries. The Status of African Agriculture report shows that agriculture is a major contributor to the Gross Domestic Product (GDP) of most of the African countries.

In the last decade, threats to the sustainability of agriculture have increased from natural and anthropogenic causes. Climate change as the main threat has led to reduced production and productivity, an increase in pests and diseases, and the early onset of drought and floods, posing a threat to livelihoods. While humans have exacerbated this situation, it should also be noted that the drift of young people out of agriculture into other fields of work has slowed down the development of agriculture. Increased rural to urban youth migration adds to the reduction in available labour. Africa is a young2 continent with the

greatest share of the young population globally. An exodus of these populations from agriculture is not only a threat to the sustainability of agriculture but ultimately the economic status of AU member states.

A bright spot that is emerging despite the challenges above, is digital agriculture. The Digitalization of Africa Report³ states that “prior to 2010, conversations about digitally-enabled agriculture had already begun – primarily among donors and multilateral agencies - but there were very few D4Ag solutions in Africa or globally.”

In **2020 th AU Executive Council** decided that AU departments develop, under the **Policy and Regulation Initiative for Digital Africa (PRIDA)**, continental sector strategies and plans and Agriculture was identified as a priority sector. PRIDA has specific goals, including connectivity, political legislation, Internet governance, and the inclusion of ICT in other sectors.

As such the African Union Commission through the Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment developed the **Digital Agriculture Strategy (DAS)** was **adopted by the Executive Council in February 2024** “to foster universally accessible and affordable broadband across the continent to unlock future benefits of internet-based services.” The DAS for Africa built on existing initiatives and frameworks such as the **Programme for Infrastructure Development in Africa (PIDA)**, and the **African Continental Free Trade Area (AfCFTA)**, the **African Union Financial Institutions (AUFIs)**, to support the development of a **Digital Single Market (DSM)** for Africa, as part of the integration priorities of the African Union. The **Smart Africa** Initiative has set the creation of a Digital Single Market in Africa as its strategic vision.

The **Agenda 2063** of the AU “for the Africa we want” contains aspirations which include goals that recognize the importance of ICT and well-educated citizens for inclusive growth and sustainable development. The key transformational 6 outcomes of agenda 2063 align with the vision of the DAS:

- **Improved living standards** will be accomplished with increased production and productivity and job opportunities that digital agriculture provides.
- **Empowering women, youth and children** via access to resources through digital agriculture tools for example, mobile money, markets information, weather data and job opportunities along the value chain.
- **Transformed, inclusive and sustainable economies via ICT penetration and contribution.** The DAS highlights examples and avenues on how this can be made possible via collaborations between the agriculture and ICT sectors
- **Integrated Africa** via intra-African trade and free movement. The RECs have a unique opportunity with the digitalization of Agriculture via central systems for markets, forecasting and pest and disease management as examples.

Africa, despite being endowed with vast agricultural potential, continues to face challenges in achieving food security, reducing poverty, and fostering sustainable economic development. Factors such as climate change, limited access to markets, and inadequate infrastructure hinder the growth and modernization of the agricultural sector. However, the continent is experiencing a digital revolution, with advancements in technology offering promising solutions to address these challenges. Digital innovations, including mobile applications, remote sensing, blockchain, and data analytics, have the potential to transform

agriculture by improving productivity, access to markets, and resilience to climate change.

The Africa Digital Agriculture Conference is conceived as a response to the urgent need to leverage digital technologies for agricultural transformation on the continent. By convening stakeholders from government, private sector, academia, and civil society, the conference aims to catalyze the adoption and scaling of digital solutions in agriculture. It seeks to provide a platform for knowledge exchange, collaboration, and innovation, with the ultimate goal of promoting sustainable and inclusive agricultural development in Africa.

Alignment of Digital Agriculture with AU Agricultural Policy Frameworks

Digital agriculture plays a central role in advancing multiple African Union agricultural policy frameworks by enabling more transparent, efficient and data-driven systems. Within the Comprehensive African Agriculture Development Programme (CAADP), digital tools enhance productivity and resilience through improved data systems, remote sensing, digital extension services and forecasting models. For example, Kenya's Digital Green and Arifu platforms support CAADP-aligned advisory services, Ethiopia's ATIS strengthens data-driven planning and monitoring, and Ghana's Esoko platform provides market information that aligns with CAADP objectives.

Across the Africa Seed and Biotechnology Programme (ASBP), digital agriculture reinforces seed system integrity by supporting digital certification, traceability and agroecological mapping. Zambia's SCCI digital certification system, Nigeria's NASC SeedTracker and Ethiopia's national digital seed certification framework illustrate how digital platforms improve seed quality assurance and regulatory efficiency.

Digital technologies are also transforming the implementation of the Partnership for Aflatoxin Control in Africa (PACA) by improving surveillance and early detection. Kenya's Aflasafe adoption program uses digital monitoring to identify contamination risks, Rwanda employs IoT-enabled storage systems to reduce aflatoxin formation and Tanzania uses mobile diagnostic tools to support national testing regimes.

Under the Ecological Organic Agriculture Initiative (EOAI), digital tools enhance certification processes, ecological monitoring and value chain access. Uganda's E-Granary platform provides services to organic producer groups, Kenya uses GIS tools to support agroecological mapping and Tunisia has piloted digital traceability for organic olive oil. Digital agriculture also strengthens implementation of the Geographic Indications Strategy for Africa (GISA) by supporting authentication, zone delineation and marketing of GI products. In Morocco, digital traceability reinforces the integrity of Argan oil value chains, Ethiopia has applied digital mapping to support the geography-based branding of coffees such as Yirgacheffe and Sidamo, and South Africa uses digital systems to monitor the Rooibos GI value chain.

The Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA) benefits from digital platforms that expand access to machinery, improve operational efficiency and enhance safety. Nigeria's Hello Tractor platform enables mobile booking of mechanization services, Kenya uses IoT-enabled tractors for performance monitoring and Ghana's digital mechanization platforms increase access for smallholder farmers.

Digital solutions are equally essential to operationalizing the Continental SPS Policy Framework by strengthening cross-border compliance and disease surveillance. Regional electronic certification systems linking Kenya, Uganda and Ethiopia support SPS documentation, Botswana's digital livestock identification systems strengthen disease monitoring and Morocco applies digital pest surveillance tools for SPS management.

Finally, digital agriculture enhances the Food Safety Strategy for Africa by improving traceability, cold chain monitoring and hazard detection. South Africa uses digital traceability for horticultural exports, Egypt adopts digital cold chain systems to reduce contamination and Ghana employs mobile diagnostic tools to support national food safety surveillance.

Overall Objective:

The overarching objective of the Africa Union Inaugural Digital Agriculture Conference is to accelerate the adoption and utilization of digital technologies in Africa's agriculture sector to enhance productivity, sustainability, and resilience.

Specific Objectives:

1. Facilitate knowledge sharing and learning among stakeholders on the latest trends, innovations, and best practices in digital agriculture.
2. Showcase successful digital agriculture initiatives and case studies from across Africa and beyond.
3. Identify policy recommendations and strategies to create an enabling environment for the adoption and scaling of digital technologies in agriculture.
4. Foster partnerships and collaboration among governments, private sector companies, research institutions, and development organizations to drive digital innovation in agriculture.
5. Empower smallholder farmers and rural communities by providing them with access to information, markets, and digital tools.

Themes:

"Shaping Agricultural Policy for Africa's Future: Innovation, Climate-Smart Practices, and Digital Transformation for Sustainable Development"

This theme integrates the importance of education as highlighted by the African Union's theme of the year, emphasizing the need to educate and empower the next generation of farmers with the skills and knowledge required to leverage digital technologies for agricultural transformation. It underscores the role of innovation and digital agriculture in achieving the objectives of Agenda 2063, particularly in promoting economic growth, food security, and sustainable development across the continent. Additionally, it aligns with the broader goals of advancing education, training, and capacity building for Africa's youth and women,

ensuring inclusive and equitable access to opportunities in the agriculture sector.

Sub Themes:

1. Digital Extension Services: Enhancing access to agricultural information, advisory services, and training through digital platforms.
2. Agri-Tech Innovations: Showcasing cutting-edge technologies such as precision agriculture, IoT devices, and drones for improving farm productivity and efficiency.
3. Market Access and Value Chains: Exploring digital solutions for connecting farmers to markets, reducing post-harvest losses, and enhancing value chains.
4. Climate Smart Agriculture: Discussing how digital technologies can help farmers adapt to climate change, manage risks, and promote sustainable practices.
5. Policy and Regulation: Addressing policy frameworks, regulations, and incentives needed to support the adoption and scaling of digital agriculture solutions.
6. Data Management and Privacy: Ensuring responsible data use, privacy protection, and data-driven decision-making in the agriculture sector.

Outcome:

The Inaugura African Union Digital Agriculture Conference aims to:

- Generate actionable insights and recommendations for policymakers, development practitioners, and other stakeholders.

- Foster collaboration and partnerships to drive digital innovation in agriculture.
- Empower farmers and rural communities through access to digital tools and information.
- Showcase successful digital agriculture initiatives and inspire further innovation and investment in the sector.

Format of the Conference:

The conference will be organized as a combination of plenary sessions, parallel thematic workshops, panel discussions, and interactive exhibitions. Keynote speakers and experts will present on various topics related to digital agriculture, followed by discussions and Q&A sessions. Thematic workshops will delve deeper into specific themes and allow for interactive discussions and knowledge sharing among participants. Additionally, there will be networking sessions and exhibitions to showcase innovative digital solutions and technologies.

Participants:

The conference will bring together a diverse range of participants, including:

- Government officials and policymakers
- Agricultural researchers and scientists
- Technology innovators and startups
- Farmers and farmer organizations
- Agribusinesses and value chain actors
- Development practitioners and NGOs

- Academia and research institutions
- Donors and investors

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